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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/652,846	08/29/2003	Timothy J. O'Brien	D6020CIP4	5440

7590 01/23/2008  
Benjamin Aaron Adler  
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EXAMINER
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HUYNH, PHUONG N

ART UNIT	PAPER NUMBER
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1644

MAIL DATE	DELIVERY MODE
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01/23/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/652,846

**Applicant(s)**

O'BRIEN ET AL.

**Examiner**

Phuong Huynh

**Art Unit**

1644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 52-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 52-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 52-55 are pending and are being acted upon in this Office Action.
2. In view of the amendment filed 11/7/07, the following rejection remains.
3. The filing date of the instant claims is deemed to be the filing date of the application 09/796,294, filed February 28, 2001. This is because US applications 09/618,259 filed July 18, 2000, 09/137,944 filed August 21, 1998 and 08/915,659 filed August 21, 1997 do not support the claimed limitation of isolated DNA encoding a TADG-14 protein variant, said TADG-14 variant having the amino acid sequence of SE QID NO: 75, as well as vector and host cell adapted for expression of TADG-14 protein of the instant application.
4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:  

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
5. Claims 52-55 are rejected under 35 U.S.C. 102(b) as being anticipated by Mitsui et al (of record, Eur J Biochem 260: 627-634, 1999; PTO 892).

Mitsui *et al* teach various nucleotide and amino acid sequences of human type 1 and type 2 neuropsin as well as mouse neuropsin. The reference human type 2 neuropsin is 100 % identical to the claimed TAGD-14 protein variant with an amino acid sequence shown in SEQ ID NO: 75 as well as cDNA encoding such protein (see page 628, Figure 2 as well as cDNA encoding such sequence, sequence alignment, in particular). Mitsui et al further teach DNA that include an intron sequence between exon 2 and exon 3 wherein the DNA encodes a human neuropsin type 2 that has an amino acid sequence 100% identical to TAG-14 variant having the amino acid sequence of SEQ ID NO: 75 (see nucleic acid sequence at page 630, col. 1, Fig 4A, in particular). Mitsui et al teach a vector such as BAC-TO-BAC comprising regulatory elements necessary for expressing the reference protein in host cell such as insect cell (see page 629, col. 2,

Recombinant human neuropsin using a baculovirus expression system, in particular). Thus, the reference teachings anticipate the claimed invention.

Applicants' arguments filed 11/7/07 have been fully considered but are not found persuasive.

Applicants' position is that claim 52 is amended as discussed supra. The TADG-14 variant sequence was detected on examination of the complete transcript of the TADG-14 gene. This variant included an intron sequence between exon 2 and 3. As a result of this inclusion, the protein that was translated therefrom had an extended amino acid sequence. This protein is identified in the instant invention as the one with SEQ ID NO: 75 (Example 3, Figs. 10, 11).

Applicant argues that the nucleotide sequence disclosed in Mitsui *et al* differs from SEQ ID NO: 6 (Fig. 3A of Mitsui *et al*). In fact, the instant specification discloses that there are differences between TADG-14 and neuropsin at the nucleotide level (pg. 48, line 6-14).

In response, Mitsui *et al* teach various nucleotide and amino acid sequences of human type 1 and type 2 neuropsin as well as mouse neuropsin. The reference human type 2 neuropsin is 100 % identical to the claimed TAGD-14 protein variant with an amino acid sequence shown in SEQ ID NO: 75 as well as cDNA encoding such protein (see page 628, Figure 2 as well as cDNA encoding such sequence, in particular). Mitsui *et al* further teach DNA that include an intron sequence between exon 2 and exon 3 wherein the DNA encodes a human neuropsin type 2 that has an amino acid sequence 100% identical to TAG-14 variant having the amino acid sequence of SEQ ID NO: 75 (see nucleic acid sequence at page 630, col. 1, Fig 4A, in particular). Mitsui *et al* teach a vector such as BAC-TO-BAC comprising regulatory elements necessary for expressing the reference protein in host cell such as insect cell (see page 629, col. 2, Recombinant human neuropsin using a baculovirus expression system, in particular). Thus, the reference teachings anticipate the claimed invention.

6. No claim is allowed.

7. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the

mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Huynh "NEON" whose telephone number is (571) 272-0846. The examiner can normally be reached Monday through Friday from 9:00 am to 5:30 p.m. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen B O'Hara can be reached on (571) 272-0878. The IFW official Fax number is (571) 273-8300.
9. Any information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Phuong Huynh/  
Patent Examiner  
Technology Center 1600  
January 22, 2008